

Programmatic Work Plan for Utilizing Fixed Price Variable Scope Contracting for Design-Bid-Build Construction Projects (SEP-14)

State Fiscal Year 2025 through State Fiscal Year 2027

Purpose and Scope

The Missouri Department of Transportation (MoDOT) and the Federal Highway Administration (FHWA) are entering into this programmatic work plan agreement to approve the use of Fixed Price Variable Scope Contracting (FPVS) on preventive maintenance and traffic control device installation types of work when deemed appropriate and beneficial. MoDOT has completed a 3-year pilot program under a 2021 Programmatic Work Plan and has provided annual updates as required. With the sunset of this Work Plan, MoDOT desires to enter into a new 3-year Programmatic Work Plan. Currently, each individual project requires a written work plan and formal approval prior to utilizing the FPVS process. With this agreement, MoDOT and FHWA agree to programmatically approve the use of FPVS, a form of “alternative contracting” identified under the FHWA’s SEP-14 program, without requiring a specific work plan and approval for each individual project.

MoDOT will select projects with work that is repetitive in multiple locations. This project delivery method will be used when project budget is a priority on preventive maintenance and traffic control installation types of work. MoDOT intends to use this contracting method on 10 to 20 projects a year on NHS routes.

Proposal

FPVS is a competitive bidding and contracting process that allows an agency to maximize the amount of work completed for a fixed budget amount. This contract method allows MoDOT to vary the amount of work to be completed to match the budget set for the project. MoDOT has successfully used FPVS contracting on numerous projects over the previous 3 fiscal years. The benefit of this procurement method is MoDOT’s ability to maximize the amount of work completed in a single contract while keeping total project costs from exceeding the project budget. An advantage to the contractor will be their ability to calculate their bid knowing the locations of work, based on priorities established in the bid proposal.

MoDOT proposes to use FPVS procurement to accomplish these projects. This contract method will allow MoDOT to vary the amount of work to be completed to match the budget set for the projects. The work included in the bid proposal is established in priority order to be completed and will exceed the amount of work that is expected to be completed by the budget in order to

capitalize on getting better than expected bids. This procurement method will have the contractor bid a unit price for the estimated quantities for each item of work in the contract. The estimated quantities included in the contract represent the amount of work than can be completed for the budgeted amount. Once the project has been awarded, the MoDOT construction office would then manage the contract by adjusting the contract quantities to hit the budgeted amount.

Procurement Overview:

Under the FPVS procurement method:

1. The budgeted amount is shown in the contract.
2. The contract indicates the project locations that are included in the initial bid quantities. The itemized bid quantities are based only on work at these locations.
3. The contract indicates the project locations that are included as the variable scope portion of the contract.
4. Contract work is listed in priority order: first, the locations included in the initial bid quantities; next, the locations included in the variable scope portion of the contract. The contractor shall begin work on the first route and continue down the list until all funds have been used.
5. The unit prices bid will apply for the work at the locations included in the initial bid quantities, as well as for those locations listed as variable scope.
6. The award of the contract will be based on the lowest responsible bidder based on their total bid for the itemized quantities in the proposal and unit price bid.
7. Once the project has been awarded, the MoDOT construction office would then manage the contract by using a change order to adjust the contract quantities upward or downward to reach, but not exceed the budgeted amount.

MoDOT will initially utilize pre-bid meetings and/or industry meetings with contractors to familiarize them with the FPVS bidding and contract process.

Schedule

MoDOT proposes to implement this programmatic agreement for another period of 3 years. Project advertisement, letting, and award will follow MoDOT standard procedures. Evaluations and reports will be completed on an annual basis.

Roles and Responsibilities of MoDOT

MoDOT will designate various Project Managers on a project-by-project basis who will be responsible for delivering a FPVS project. The Project Manager is responsible for implementing the FPVS project in accordance with state and federal laws and regulations while meeting the

project's scope and budget. The Project Manager is responsible for coordinating with various project team members from design, bridge, construction, environmental, financial, etc. during project delivery. The Project Manager will hand-off project responsibility to a MoDOT Resident Engineer during construction of the project. MoDOT's Design Division Bidding and Contract Services Engineer and the Design Liaison Engineer will serve as the main point of contact with FHWA for FPVS projects. Project specific submittals, approval requests, and coordination may be delegated to the Project Manager, with the approval and under the direction and supervision of the Central Office Design Division.

MoDOT will proactively coordinate and collaborate with FHWA and use the FHWA PODI process to define the level of FHWA involvement in all facets of FPVS projects. The Project Manager will coordinate project actions, approval requests, project coordination meetings, submittals, and written or verbal coordination with FHWA. Written responses to FHWA submitted comments or inquiries will be provided in a timely manner.

Roles and Responsibilities of FHWA

The FHWA designated Transportation Engineer (TE) will have primary responsibility for ensuring a FPVS project is executed in accordance with federal laws while implementing FHWA's Performance Plan and required stewardship and project involvement. The designated TE will serve as MoDOT's main point of contact for FPVS projects in their respective MoDOT District. Project specific submittal reviews, approvals, meeting attendance and coordination may be delegated to other FHWA staff members, with the approval and under the direction of the designated FHWA TE. FHWA will proactively coordinate and collaborate with MoDOT to determine an agreed upon level of FHWA involvement in all facets of the FPVS project. FHWA will provide timely reviews of project submittals and written review comments. If the FHWA TE becomes unavailable during a review period, the FHWA Project Implementation Team Leader or FHWA Deputy Division Administrator may be contacted regarding all project-related issues.

MoDOT Policy and Guidelines

MoDOT developed basic guidance for FPVS contracting in MoDOT's Engineering Policy Guide, Article 147.4. This article contains guidelines, procedures, benefits, and potential drawbacks for using FPVS contracts. EPG 147.4 will be updated with revised guidance and procedures as MoDOT gains additional experience with FPVS contracting.

The following additions to MoDOT Engineering Policy Guide have been incorporated during the previous Workplan timeframe (FY 21 through FY 24):

- Clarification that preventative maintenance and traffic control are attractive project types to use FPVS contracting.

- Clarification that the JSP will outline the priorities for contract adjustments.
- Clarification for balancing liquidated damages with flexibility to allow for additional work while completing the project within the original timeframe.
- Added language to consult with the Core Team on the utilization of FPVS.
- Clarification that mobilization will not be adjusted with the additional work.
- Added clarification on the mechanics of adding extra work.
- A list of example project types was added to the EPG.

Evaluation/Performance Measures

MoDOT will evaluate the effectiveness of FPVS contracting as projects are completed. Periodic meetings will be conducted with MoDOT project staff and FHWA to modify and improve the guidelines for FPVS contracting. If significant changes are identified those changes will be communicated and coordinated with both Industry and the FHWA Missouri Division Office. The FPVS Job Special Provisions continue to evolve with the different types of projects that are delivered using FPVS delivery method. The policy changes from the previous Workplan period are examples of JSP modifications that have been incorporated as a result of continual improvement to the MoDOT process and consultation with the FHWA Missouri Division.

MoDOT reports use of innovative contracting methods under MoDOT Tracker Measure 3e – Innovative Contracting Methods. This measure tracks use of non-traditional contracting methods by MoDOT such as Design-Build, A+B Contracting, Alternate Technical Concepts, and will also include FPVS Contracting. MoDOT’s target for innovative contracting is 10% of MoDOT’s total construction program (in dollars). MoDOT’s Tracker can be found at <https://www.modot.org/tracker-measures-departmental-performance>. The Tracker Measure is in the Delivering Efficient and Innovative Transportation Projects section.

In addition to the performance measure above MoDOT will provide the following information:

- 1) FPVS Contracts Proposed: MoDOT will assess the types of FPVS contracts proposed and the types of FPVS projects approved for addition to MoDOT’s construction program.
- 2) FPVS Contracts Let: MoDOT will list all contracts awarded during the year using the FPVS contracting method and the bid analysis used to determine award.
- 3) Lessons Learned: MoDOT will provide a summary of any lessons learned from individual FPVS projects and include items that may be improved for future FPVS projects.
- 4) Industry Reaction: MoDOT will record and track responses from the contracting industry, including an assessment of FPVS process improvements proposed by industry.

Reporting

MoDOT will provide the FHWA Division Office with initial, interim, and final reports on this SEP-14 Programmatic work plan.

- 1) Initial Report: At the end of Year 1, provide an initial report with the following information:
 - a. List all projects let during Year 1 using this contracting method
 - b. Report on Performance Measures above for Year 1 projects
- 2) Interim Report: At the end of Year 2 and each succeeding year before the final year, provide an interim report with the following information:
 - a. List all projects let during succeeding years using this contracting method
 - b. Report on Performance Measures above for projects awarded during that succeeding year
- 3) Final Report: At the end of the programmatic approval period, provide a final report with the following information:
 - a. List all projects let during the programmatic approval period using this contracting method
 - b. Report on Performance Measures above for projects awarded during the programmatic approval period

Periodic meetings will be conducted with MoDOT Design, MoDOT Construction and Materials, and FHWA to modify and improve the guidelines for using FPVS, as necessary. In the event significant changes are identified as necessary, those changes will be communicated and coordinated with both Industry and the FHWA Missouri Division Office.

Summary of Previous FPVS Projects

MoDOT has successfully used FPVS Contracting on the following projects as part of the previous Sep-14 Process:

FY 21 and FY 22

Job Number	Letting	Scope of Work	Funding	Budget	Engineer's Estimate	Number of Bidders	Contractor	Bid	Scope Change
J6P3605	21-Jan-22	Seal Coat	Federally	\$554,000	\$583,113.45	4	Missouri Petroleum	\$764,916.53	27.57%
							N.B. West Contracting	\$835,583.85	
							Blevins Asphalt	\$872,220.76	
							Emery Sapp & Sons	\$909,369.05	
J6S3606	21-Jan-22	Seal Coat	State-Only	\$182,000	189,130.36	4	Missouri Petroleum	\$230,237.48	20.95%
							N.B. West Contracting	\$244,415.21	
							Blevins Asphalt	\$261,624.24	
							Emery Sapp & Sons	\$302,843.05	
J6S3657	10-Oct-21	Hot Polymer	Federally	\$1,500,000	\$1,487,102.62	3	Emery Sapp & Sons	\$1,365,499.66	-9.85%
							Parking Lot Maintenance	\$1,390,960.95	
							Interstate Improvement	\$2,439,656.65	
J6P3646	21-Jan-22	MMA	Federally	\$500,000	\$507,782.52	2	Louis-Company	\$478,115	-4.58%
							R.V. Wagner	\$498,975.20	
JSL0001	15-Apr-22	HMA Crack Filling	Federally	\$1,346,000	\$1,428,500	3	Parking Lot Maintenance	\$574,938.26	-148.46%
							Sweetens Concrete Services	\$604,168.48	
							Fahrner Asphalt Sealers	\$797,759.54	
J3MAMD01 J4MAMD01	18-Jun-21	Contractor Leveling Course	State-Only	\$1,678,000	\$1,678,000	3	Magruder Paving	\$1,799,291.19	6.74%
							Emery Sapp & Sons	\$2,082,705.05	
							Capital Paving & Construction	\$2,128,460.69	
J6MAMD02	18-Jun-21	Cape Sealing	State-Only	\$1,071,000	\$1,148,785.41	2	Microsurfacing Contractors	\$1,014,413.59	-5.58%
							Missouri Petroleum	\$1,055,030.54	
J0I3006H	21-May-21	HMA Crack Filling	Federally	\$500,000	\$500,000	7	Fahrner Asphalt Sealers	\$559,217.60	27.23%
							Parking Lot Maintenance	\$573,411.30	
							Sweetens Concrete Services	\$665,665.65	
							Vance Brothers	\$687,097.60	
							Louis-Company	\$910,771.92	
							American Pavement Solutions	\$1,142,930.66	
R.A. Knapp Construction	\$1,968,758.30								
J6P3543	19-Feb-21	Seal Coat	Federally	\$500,000	\$540,529.03	4	Blevins Asphalt	\$484,600.00	-3.18%
							Missouri Petroleum	\$489,902.85	
							N.B. West Contracting	\$509,999.00	
							Emery Sapp & Sons	\$587,853.35	
J6S3591	19-Feb-21	Seal Coat	State Only	\$351,000	\$318,508.83	4	Missouri Petroleum	\$318,519.32	-10.20%
							Blevins Asphalt	\$321,500.00	
							N.B. West Contracting	\$328,500.00	
							Emery Sapp & Sons	\$397,888.06	

FY 23

Job Number	Letting	Scope of Work	Funding	Budget	Engineer's Estimate	Number of Bidders	Contractor	Bid	Scope Change
J6I3651	1/20/2023	Bridge Crack Filling	Federally	\$1,500,000	\$1,743,081.16	6	Truesdell	\$1,249,249.00	-16.7167
							Louis-Company	\$1,428,500.00	
							AAD Contracting	\$1,489,430.00	
							Fahrner Asphalt Sealers	\$1,627,477.40	
							Kozeny-Wagner	\$1,958,850.00	
							R.V. Wagner	\$2,152,582.80	
J6M3411	1/20/2023	Seal Coat	State-Only	\$372,000	\$347,597.79	1	Missouri Petroleum	\$411,289.42	10.56167
JSL0085	1/20/2023	Seal Coat	Federally	\$680,000	\$589,249.27	2	Blevins Asphalt	\$601,083.00	10.56167
							Missouri Petroleum	\$679,734.04	
JSL0051	2/17/2023	Hot Polymer	Federally	\$1,200,000	\$1,205,796.35	1	Parking Lot Maintenance	\$1,153,928.25	-3.83931
JKU0048	3/17/2023	LED Lighting	Federally	\$5,000,000	\$5,000,000.00	1	Custom Lighting Services	\$7,407,919.00	48.15838

FY 24

Job Number	Letting	Scope of Work	Funding	Budget	Engineer's Estimate	Number of Bidders	Contractor	Bid	Scope Change
JKU0232	6/16/2023	Pavement Marking	Federally	\$1,200,000	\$1,767,780.38	2	Streetwise, Inc	\$1,514,526.00	26%
							Heartland Traffic Services, Inc	\$2,088,492.50	
JSL0005	1/19/2024	Bridge Crack Filling	Federally	\$1,500,000	\$1,851,168.42	5	R.V. Wagner, Inc	\$1,449,233.20	-3%
							Truesdell Corporation of Wisconsin Inc	\$1,507,507.00	
							Louis-Company, LLC	\$1,539,253.10	
							RAM Construction Service of Michigan, Inc	\$1,688,677.00	
							Venture Construction, Inc	\$2,071,243.54	
JST0077	1/19/2024	Seal Coat	State-Only	\$372,000	\$392,908.95	3	N.W. West Contracting Company	\$331,989.26	-11%
							Missouri Petroleum Products Company, LLC	\$424,324.90	
							Blevins Asphalt Construction Company, Inc	\$456,893.00	
JSL0144*	5/17/2024	Seal Coat	Federally	\$1,360,000	\$1,501,484.69	TBD	TBD	TBD	TBD
JSL0142*	5/17/2024	Hot Polymer	Federally	\$1,500,000	\$1,656,668.50	TBD	TBD	TBD	TBD
JSL0122*	5/17/2024	HMA Crack Filling	Federally	\$822,000	\$818,934.11	TBD	TBD	TBD	TBD

* Denotes that the projects are currently out for bid